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## Physical Security, Locking Systems & Force Protection

Team Members 2001

Area Code 812 Crane DSN 482

Physical Security And High Security Lock & Key Systems

Navy Team Leader .. 854-5768 CMC Team Leader ... 854-5860

Special Projects

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Team Leader..... 854-5604

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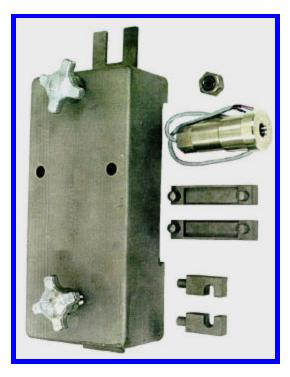
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# Anti-Intrusion Barrier Technical Data

The Anti-Intrusion Barrier (AIB) (NAPEC 0963) is a cover designed to provide intrusion detection capabilities for the standard Navy high security hasp. The unit consists of a 3/16" cast stainless steel cover, associated mounting hardware and the same balanced magnetic sensor used in the Universal Security System (NAPEC 1332). The cover is designed to fit over the Navy High Security Hasp (NAPEC 0957/0958 or MK2 MOD9) and is secured in place by means of two jackscrews, one active and one inactive. The inactive jackscrew secures the cover to the magazine door while the active jackscrew provides a contact with the sensor to close the Intrusion Detection System (IDS) loop and place the alarm in a secure mode. The sensor is mounted behind the door and is fully protected from attack and tampering. Access to the hasp or padlock can only be obtained by removing the AIB cover which places the magazine in an alarmed state, prior to initiation of any attack on the locking system.

For technical assistance or customer support contact Crane personnel at:

(812) 854-5768/5615/5612 DSN 482-5768/5615/5612



Anti-Intrusion Barrier (NAPEC 0963)

## Ashore Hasps Technical Data

The Ashore High Security Hasp approved for the Navy is the MK2 MOD9 shrouded hasp. The Style 1 Hasp (0957) is used for right-hand active doors. The Style 2 Hasp (0958) is used for left-hand active doors. These are the current two-piece versions of the Navy High Security Hasp.

These hasps are available through the Federal Supply System under the following National Stock Numbers (NSNs):

MK2 MOD9 Style 1 (0957) NSN 5340-01-196-2547

MK2 MOD9 Style 2 (0958) NSN 5340-01-235-6907

For technical assistance or customer support contact Crane personnel at:

(812) 854-5768/5615/5612 DSN 482-5768/5615/5612



High Security Hasp, Style 2 (0958)



## Shipboard High Security Hasps Technical Data

The 1300 Series High Security Hasp is the approved hasp for use onboard Navy ships. The hasp is designed to be used with high security locks and Navy dual control padlocks (Style 1). Any of these locks, when used with the 1300 Series Hasp, provide a high security locking system meeting current requirements.

The 1300 Series High Security Hasp has been placed in the Federal Supply System and is no longer available from Crane. However, the technical point of contact for the hasp is still Crane.

The 1300 Series High Security Hasp consists of six styles for installation on a range of different door types:

Style 1 - Outward swinging door

Style 2 - Armored hatch; scuttle

Style 3 - Raised hatches

Style 4 - Scuttles

Style 5 - Inward swinging QAWT doors

Style 6 - Inward swinging doors other than QAWT

The Federal Supply System does not stock 1300 Series Hasps as individual styles. The hasp is stocked as two different packages: (1) the Basic Hasp Assembly; and (2) the Accessory Kit. The Basic Hasp Assembly NSN is 5340-01-281-7938; the Accessory Kit NSN is 5340-01-282-8275.

The correlation between the hasp style required and the two listed packages is as follows:

Style	Basic Hasp Assembly	Accessory Kit
1	Yes	No
2*	Yes	No
3	Yes	Yes
4	Yes	No
5	Yes	Yes
6	Yes	Yes

\*The Style 2 hasp requires the fabrication of a spacer. Details for measuring and assembling the spacer are included in the Style 2 Installation Drawings.

Do not throw away the extra parts in the Accessory Kit. These parts may be useful if a different style hasp is required sometime in the future.

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(812)-854-5768/5612/5636 DSN 482-5768/5612/5636



1300 Series High Security Hasp

## Universal Security System Technical Data

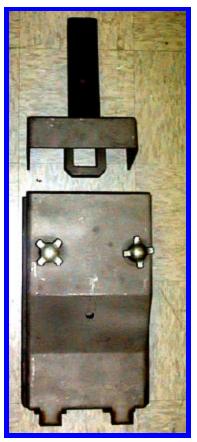
The Universal Security System (NAPEC 1332) is a hasp, locking system and intrusion detection system in one unit. It is used on magazines with large sliding, typically hydraulic, doors such as missile motor magazines. It was designed to replace the earlier Missile Motor Magazine Security System (NAPEC 1288) and to provide easier installation. The system consists of a large hinged box which mounts on the wall of the magazine and a tang unit which mounts on the sliding door of the magazine. The box is 1/4" cast stainless steel and houses the same balanced magnetic sensor used in the Anti-Intrusion Barrier (NAPEC 0963). The cover of the system is secured in place by means of two jackscrews, one active and one inactive. The inactive jackscrew secures the cover to the base of the unit, while the active jackscrew provides a contact with the sensor to close the IDS loop and place the alarm in secure mode. When the door is closed, the tang slides into the wall unit and is secured with a high security padlock. When the cover is closed and secured, the padlock is fully protected from attack or tampering. The hydraulic controls for the magazine door can be placed inside the unit to protect them from damage or tampering.

The Universal Security System is designed to accommodate the 833 Series or 831 Series High Security Padlock. A later design modification allows the system to accommodate the Navy designed dual control padlock. This is accomplished on units already in service by replacing the tang with a newer version. This replacement can be easily accomplished

and has been performed without downloading the magazine, provided proper safety precautions are exercised. All new installations utilize a tang which will accommodate either the 831/833 Series High Security Padlock or the Navy dual control padlock.

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The Universal Security System (NAPEC 1332)

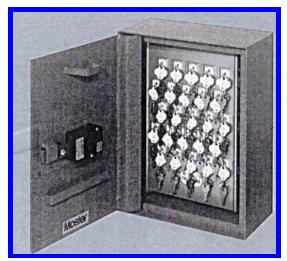
## Key Control Containers Technical Data

High security wall key control cabinets provide necessary protection for restricted access to keys. The Model KC-1612 cabinet mounts easily to the wall to keep keys at your fingertips, yet off limits to unauthorized personnel.

Cabinet capacity is 125 keys. The body is constructed of 1/8" steel. A Group 1 combination lock, fortified by drill resistant material, is incorporated into the 1/4" steel security door. A recessed full length hinge, in conjunction with an interlocking jamb, protects the hinge side of the door. The cabinet is equipped with a dual control key system.

The Model GL-1259 Utility Locker is a versatile, secure storage unit. Its compact size permits one to four units to fit neatly inside the Standard, Legal Size, Class 6 GSA-Approved Security Filing Cabinet.

The Optional Key Rack, Model KR-642, provides efficient, orderly control of limited access keys. The rack features six flip panels with seven key hooks each. The KR-642 Key Rack is equipped with both temporary and permanent key tags numbered consecutively from 1 to 42, and the unit fits perfectly inside the protective utility locker.



Model KC-1612 Cabinet



Model GL-1259 Utility Locker with Model KR-642 Optional Key Rack.

The Key Locker, Model KL-749, is a compact storage container used for safe-guarding limited access keys and other select properties. This lightweight but tough unit is constructed of a 1/8" steel body with a top opening, removable 1/4" steel door. This economical locker features a U.L. listed Group 1R Combination Lock.

In addition to keys, the locker is suitable for secure storage of evidence, petty cash, combination cards, etc. This locker can be secured into an existing security container or can be mounted separately in any location.

The Class 6, GSA approved key safe can be used for mobile tactical assemblies where, through installation, they become an integral part of the vehicle, vessel or aircraft. The one drawer file is letter size with four holes in the bottom for anchoring. This can be outfitted with six portable key lockers as discussed below.



Model KL-749 Key Locker

The Class 6 Key Safe affords protection for:

- 30 man-minutes against covert entry.
- 20 man-hours against surreptitious entry.



Class 6 GSA Approved Safe

For technical assistance or customer support contact Crane personnel at:

(812)-854-5768/5860/5612 DSN 482-5768/5860/5612

# Deployable Armory Technical Data

The Deployable Armory provides a means to transport a secure armory, with weapons and ancillary equipment intact, when a military unit is required to deploy into a hostile environment.

The typical unit size is approximately  $20^{\circ} \times 10^{\circ} \times 10^{\circ}$ ; however, sizes can vary depending on requirements. The weight for this unit is approximately 25,000 pounds empty. The unit is constructed with a  $1/4^{\circ}$  steel exterior shell mounted to steel skids. The interior is lined with an insulation layer,  $2^{\circ}$  of hardwood and a plywood finish layer.

This system is approved in OPNAV-INST 5530.13 and DOD 5100.76M and provides good protection against attack by drilling, sawing, thermal, and gunfire.

The unit has an exterior security door and a secondary interior door for

Deployable Armory interior

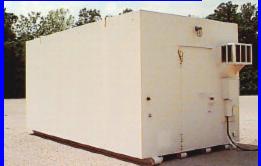
issue of weapons. It has heat and air conditioning for climate control, along with internal and external lighting. Units can be equipped with IDS per customer specification if required.

The range of use of these deployable units can vary to any type of controlled storage.

For technical assistance or customer support contact Crane personnel at:

(812) 854-5860/5768/5615/5612 DSN 482-5860/5768/5615/5612





Deployable Armory

### Pre-Fabricated Explosive Magazines Technical Data

Pre-fabricated magazines are available in a variety of sizes - at about half the cost of on-site construction. These magazines provide a cost effective alternative to conventional construction for fuse and detonator, small arms ammunition and pyrotechnics, and ready service magazines. The pre-fabricated magazine also provides economical storage for Category I, II, III, and IV AA&E items when existing facilities do not meet the design criteria in OPNAVINST 5530.13B. Category I and II items **must** be protected by IDS if stored in this type of magazine.

The magazines are made of 1/4" exterior steel plate and 3" interior hardwood. The magazines have a protective exterior coating capable of resisting environmental elements and preventing oxidation/deterioration of the magazine.

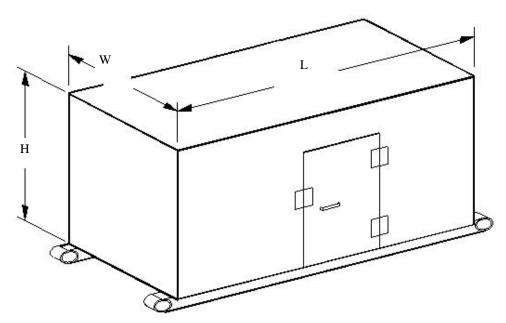
Ventilation is provided to prevent dampness and heating of stored explosive materials. Ventilation openings are added in pairs, one near the ceiling and one near the floor, to provide for maximum air flow through the magazine. Ventilation openings in side walls and foundations are offset or shielded for bullet-resistant protection. Vents or similar openings of significant size to permit entry or removal of magazine contents are equipped with either steel bars, 3/4" or larger, or riveted steel grating to meet or exceed specifications. Bars and/or grating are securely welded to the steel shell.

The door is mounted on two heavyduty strap hinges. All hinges, vents, and shrouds are welded in place.

Pre-fabricated magazines are available in a variety of sizes, starting at 3' X 3' X 3'. Larger, duplex magazines are available in sizes up to 44' X 27' X 8'. These larger duplex magazines are delivered in two halves and are assembled on site. Before any magazines can be installed on site, prior approval of a site plan must be obtained from the Safety Department at that activity.

For technical assistance or customer support contact Crane personnel at:

(812) 854-5860/5768/5615/5612 DSN 482-5860/5768/5615/5612



Pre-Fabricated Explosive Magazine

OUTSIDE DIMENSIONS		APPROXIMATE	APPROXIMATE	
L	W	Н	WEIGHT (LBS)	INTERNAL CUBE
3	3	3	1400	8
5	5	7	5400	96
8	7	7	9740	252
8	7	8	10500	294
12	8	8	13750	539
12	10	8	17800	690
20	8	8	21500	931
20	10	8	26400	1195
40	8	8	39500	1911
40	10	8	48000	2455
	DUPLEX (DOUBLE WIDE) MAGAZINES			
16	16	8	31000	1575
24	16	8	47250	2415
40	16	8	65500	4095
40	20	8	76800	5187
40	24	8	88400	6279
44	27	8	98500	7826

## Zero Explosive Arc Magazines **Technical Data**

The Zero Explosive Arc Magazine is an adaptation of a standard prefabricated magazine developed primarily for the Marine Corps Security Force. By utilizing a specially designed Hazard Reduction Container (HRC) inside a modified 3' X 3' X 3' pre-fabricated magazine, the net explosive arc for certain ordnance items is reduced to zero. This allows these items to be stored inside or adjacent to areas that would otherwise be prohibited by safety regulations. To date, only three specific ordnance items have been tested and approved for such storage. Storage of any items other than those listed below constitutes a safety violation and could pose serious risk of injury or loss of life:

M433 40MM HEDP Grenade M67 Fragmentation Grenade MK3A2 Concussion Grenade

The HRC is a standard 20" metal tool box which is filled with a pumice and epoxy resin mixture. The mixture surrounds PVC sleeves which are used to stow the ordnance items. This mixture absorbs the blast pressure and serves to greatly reduce the pressure released into the magazine. It also serves to reduce or eliminate the risk of sympathetic detonations within the magazine.

The HRC must be used in conjunction with the pre-fabricated magazine to achieve a zero explosive arc. These containers are intended to serve as a part of the magazine for storage of ordnance. They should not be used to transport ordnance items. The containers are expensive and in limited supply at this time. The HRC for each item listed above is peculiar to that item. They are not interchangeable.

The Zero Explosive Arc Magazine is easily distinguishable from other magazines due to the placard which identifies it. It will also have a total of eight vents, two in each side and two in the door. These vents must not be blocked. Blocking the vents could prevent proper venting of explosive over pressure which could result in the failure of the magazine to contain the blast.

Requests for Zero Explosive Arc Magazines must specify the quantity and type of items to be stored in each magazine. This will allow for determination of minimum number of HRCs required per magazine.

For technical assistance or customer support contact Crane personnel at:

(812)854-5860/5768/5615/5612 DSN 482-5860/5768/5615/5612



Hazard Reduction Container

# Security Alert Team Arms Locker "Reaction Force Locker" Technical Data

The Reaction Force Locker (RFL) is a stand-alone, high security locker designed for shipboard use to augment the ship's armory. The RFL can be placed in the ship's passageway and provides a secondary issue point for small arms.

RFLs were originally designed to store M14 and M16 rifles, 12 gauge shot-guns, .45 caliber pistols, and their equipment and ammunition. By replacing the existing butt cups and barrel clips, the RFL can store M60, .50 Caliber

Machine Guns, and MK19 Grenade Launchers. Beretta 9MM pistols can be stored in the RFL as well.

For technical assistance or customer support contact Crane personnel at:

(812) 854-5860/5768/5615/5612 DSN 482-5860/5768/5615/5612



Reaction Force Locker



Reaction Force Locker interior

# 10 Weapons Storage Containers Technical Data

GSA approved Class 5 weapons storage units are designed for the secure storage of rifles, pistols of most calibers, riot shotguns and shoulder fired automatic weapons.

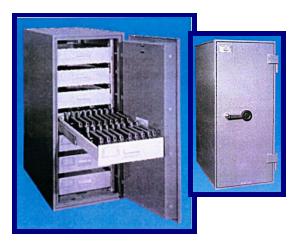
The Class 5 weapons storage container affords protection for:

- 30 man-minutes against covert entry
- 10 man-minutes against forced entry
- 20 man-hours against surreptitious entry

The standard configuration for storage of weapons is seven drawers. This provides sufficient vertical height for most weapons to be stored within the drawer. There is a nine drawer cabinet now available (72 extra pistols can be stored in the two additional drawers).

The heavy duty construction of the shallow weapons drawer is designed to carry in excess of 125 pounds. The full depth suspension allows the drawer to be fully extended to clear the drawer above, providing easy access to the weapons. There are a number of standard inserts which may be used. The weight of the cabinet when empty is 1020 pounds. The inserts available are:

(1) **Pistol Rack Insert (489-120).** The pistol rack insert is designed to hold .45 or .38 caliber pistols and 9MM Berettas. It holds 36 pistols per drawer or 252 pistols in a standard seven drawer configuration. The rack insert can house 32 Berettas per drawer with the total storage capacity of 224. In a standard seven drawer configuration, the drawer will accommodate .38 caliber pistols with 2", 4" or 6" barrels.



Class 5 Weapons Storage Container



Pistol Rack Insert (489-120)

(2) **Center Divider Insert (489-121)**. The center divider insert will divide the drawer in half to permit storage of four M16 rifles or M79 grenade launchers per drawer.



Center Divider Insert (489-121)

(3) **Quarter Divider Insert (489-122)**. The quarter divider insert is used to divide the shallow weapons drawer into four compartments for the storage of M14 rifles.



Quarter Divider Insert (489-122)

(4) **Drawer Liner Insert (489-123)**. The drawer liner insert is a vinyl liner designed to protect the weapons from scuffing and scarring while being inserted or removed.



Drawer Liner Insert (489-123)

5) **Universal Cart (489-124)**. The universal pull out cart is designed to hold 32 shoulder fired weapons (M14, M16, 870 riot shotguns, marksmanship rifles). Two full depth drawers equipped with hasps for storage are factory installed

when ordering the container equipped with the universal pull out cart.



Universal Cart (489-124)

(6) **State Department Configuration**. This configuration is similar to that of the universal pull out cart with the exception that you can store both shoulder fired weapons and pistols. There is room for 16 shoulder fired weapons and approximately 25 pistols. One side has shelves for the pistols and the other a rack for the weapons.



State Department configuration

For technical assistance or customer support contact Crane personnel at:

(812) 854-5768/5615/5612 DSN 482-5768/5615/5612

# 1 1 Multi-Purpose Small Arms Storage Rack Technical Data

The multi-rack is a low security small arms storage rack developed by NSWC Crane. The rack is designed with interchangeable internal components which allow a wide variety of weapons to be stowed in one rack. A partial list of the weapons that can be stowed in the current configuration are:

M16 Rifle M249 SAW M14 Rifle AT-4 MP5 12 Gauge Shotgun M79 Grenade Launcher Pistols MK19 Grenade Launcher **SMAW** M60 Machine Gun M4 Carbine .50 Caliber Machine Gun M240G Machine (Barrel removed) Gun

The multi-rack allows storage of many different types of weapons without concern about removal of the weapon by breaking it down and sliding it under a locking bar or chain. As new weapons are put into service, the configuration of the rack can be changed to accommodate them, eliminating the need to procure new racks.

The multi-rack is designed to store ten rifles. The other arms racks lack flexibility in both type and quantity of weapons that they store. The multi-rack enhances security and allows flexibility to accommodate changing mission requirements.

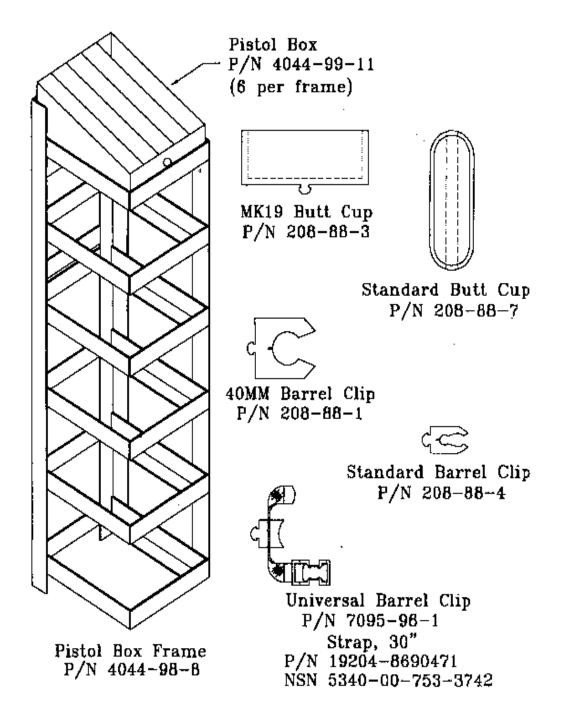
For technical assistance or customer support contact Crane personnel at:

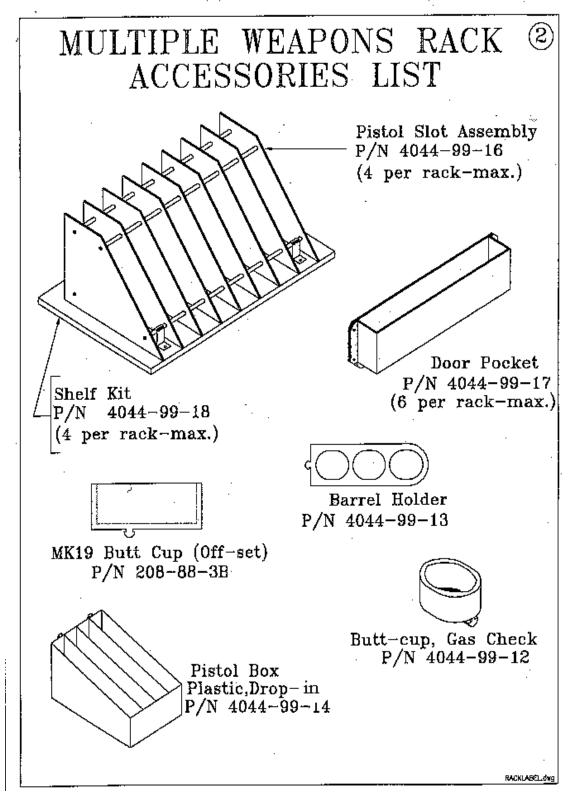
(812) 854-5860/5768/5615/5612 DSN 482-5860/5768/5615/5612



Multi-Rack

# MULTIPLE WEAPONS RACK ACCESSORIES LIST





Multiple Weapons Rack			
2	stora	ge Capacities	5/22/2000
WEAPON	QTY RACK		NOTES
M60 BASIC/MK43	10	STANDARD BUTT CUP STANDARD BARREL CLIP	
M60 E3	10	**	
M240G	10	>>	
M249 SAW	10	>>	
M2 50CAL MG	10	STANDARD BUTT CUP UNIVERSAL BARREL CLIP	CUT QTY TO 5 WITH 2 EXTRA BARRELS EA.
M14	10	STANDARD BUTT CUP STANDARD BARREL CLIP	
M16 (A1 or A2)	10	>>	LEAVES RM FOR 2 SHELVES
M4A1 CARBINE	10	,,	LEAVES RM FOR 4 SHELVES
AK47	10	99	
CHICOM TYPE 56	10	**	LEAVES BY EOD O SUELVES
12 GA SHOTGUN	10	>>	LEAVES RM FOR 2 SHELVES
MP5	10	STANDARD BUILT GUR	
MP5NSD (SILENCED MP5)	10	STANDARD BUTT CUP UNIVERSAL BARREL CLIP	
MP5N	28	SHELF KIT GUN HOOKS	LOWER RACK ON GUN HOOKS
MP5NPDW	10	SHELF KIT	2 PER HALF-SHELF(BOTTOM) 3 PER HALF-SHELF (TOP)
UZI	8	"	2 PER HALF-SHELF
M203 GREN. LAUNCHER	16	TOP TRAY ASSY.	THESE WILL STORE MOUNTED ON M16
M203 (M4A1VER) GREN. LAUNCHER	24	SHELF KIT	4 PER HALF-SHELF(BOTTOM) 8 PER HALF-SHELF (TOP) THESE WILL ALSO STORE MOUNTED ON M16
MK19 GREN. LAUNCHER	4	MK19 BUTT CUP(S) 40MM BARREL CLIP	USE OFF-SET BUTT CUP FOR SIDE MK19'S
M79 GREN. LAUNCHER	10	STANDARD BUTT CUP 40MM BARREL CLIP	
M244 60MM MORTAR	10	UNIVERSAL BARREL CLIP	REMOVE TRIPOD & BASEPLATE SMALL B-PLATE FITS INSIDE
AT4 (84MM LAUNCHER)	6	NO BUTT CUP UNIVERSAL BARREL CLIP	
M3(CARL GUSTAV)	6	"	
SMAW LAUNCHER	4*	NO BUTT CUP UNIVERSAL BARREL CLIP	*QTY COULD BE 5
GAU 17 MINIGUN	4	"	0 0 0
M1911 COLT 45 PISTOL	120	PISTOL BOX FRAME PISTOL BOX (6)	30 PISTOLS PER FRAME
M9 BERETTA 9MM	120	"	"
SIG SAUER(P226) 9MM PISTOL	120	1)	23
MK2 RUGER (22CAL) PISTOL	120	"	
MK23 SOCOM 45CAL PISTOL	32	SHELF KIT AND SHELF KIT PISTOL SLOTS	8 PER PISTOL SLOT
S&W 686 357MAG REVOLVR	32		INSERT.
50 CAL SNIPER RIFLE	10	STANDARD BUTT CUP STANDARD BARREL CLIP	BUTT STOCK REMOVED

## Signs Technical Data

Restricted area, non-restricted area, and perimeter signs are required for compliance with OPNAVINST 5530.13B and 5530.14C.

Restricted area signs which are posted at regularly used external points of ingress measure approximately 3' X 3' with proportionate lettering reading as follows:

### WARNING

RESTRICTED AREA
KEEP OUT

## AUTHORIZED PERSONNEL ONLY

AUTHORIZED ENTRY INTO THIS RESTRICTED AREA CONSTITUTES CONSENT TO SEARCH OF PERSONNEL AND THE PROPERTY UNDER THEIR CONTROL.

> INTERNAL SECURITY ACT OF 1950 SECTION 21; 50 U.S.C. 797 (1976)

The signs are printed on a white background with all words except "WARNING" printed in black. The word "WARNING" is printed in red.

The signs for the perimeter of restricted areas measure approximately 12" x 18" and read:

### WARNING

RESTRICTED AREA
KEEP OUT

### AUTHORIZED PERSONNEL ONLY

When a language other than English is prevalent, Restricted Area signs are posted in both languages.

These signs can readily be obtained in English, English/Spanish, English/Japanese, and other languages as deemed necessary by the requesting activity. Requests for custom sizes and languages may be accommodated but will incur additional costs.



Signs printed in various languages

Non-restricted area signs, which are posted at regularly used external points of ingress measure approximately 3' x 3' with proportionate lettering reading as follows:

For technical assistance or customer support contact Crane personnel at:

(812) 854-5812/5615/5612 DSN 482-5812/5615/5612

### **WARNING**

\*U. S. NAVY PROPERTY
AUTHORIZED PERSONNEL ONLY

AUTHORIZED ENTRY ONTO THIS
INSTALLATION CONSTITUTES
CONSENT TO SEARCH OF
PERSONNEL AND THE
PROPERTY UNDER THEIR CONTROL.

\*Marine Corps activities may substitute the words "U.S. Marine Corps."

The signs are printed on a white background with all words printed in black.

Non-restricted area signs for the perimeter of a non-restricted area measure approximately 11" x 12" in size with proportionate lettering reading as follows:

## U. S. GOVERNMENT PROPERTY NO TRESPASSING

Restricted area signs for waterfront are also available. They measure 2' x 3' and proportionate lettering is identical to the 12" x 18" restricted area sign.

## 13 Decorative Security Barriers Technical Data

Precast concrete furnishings can provide an aesthetic, cost-effective alternative to the more traditional security "hardware" commonly used to impede vehicle access into a controlled area. In situations where the use of Caltrops, Concertina or the "Jersey Bounce" might be inappropriate or offensive to the local community, or where the use of such traditional security devices might project an atmosphere of implied threat or confrontation, precast furnishings can provide a measure of security without the appearance of fortifying a structure or installation.

Concrete furnishings are a common part of urban settings, and can easily be incorporated into the natural landscaping around government buildings and facilities to serve as a substantial barrier system. Available in several different colors, patterns and styles, these items can blend in to the surroundings to provide protection which is inconspicuous, yet effective.

Strategic placement of these "decorative" security devices can prevent an assailant on a suicide mission from reaching his target. They can also be used to establish a clear zone around a facility, which reduces the effectiveness of a vehicle bomb by prohibiting its placement directly adjacent to the target. Use of these items can provide a level of protection against certain threats, even in areas previously thought to be unhardenable due to b-cation and surroundings.

Crane performs security assessments, designs perimeter barrier systems utilizing traditional security equip-

ment and precast concrete furnishings, procures the necessary equipment and material, and can perform the installation if required.

For technical assistance or customer support contact Crane personnel at:

(812) 854-5604/5768/5860/5612 DSN 482-5604/5768/5860/5612



Lighted Bollard 18" Diameter, 36" High Weight - 850 lbs. Shown in: Gray Weatherstone

Bollard 18" Diameter, 36" High Weight – 980 lbs. Shown in: Sand Weatherstone





Picnic Table w/Base 96" x 62" x 36" High Weight - 3800 lbs. Shown in: Sand Ground







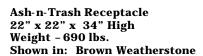
Rectangle Planter
72" x 30" x 30" High
Weight - 1800 lbs. (Empty)
Shown in: Tan w/Gray Matrix

Square Planter 30" x 30" x 30" High Weight - 950 lbs. (Empty) Shown in: Tan w/Gray Matrix





Bench 84" x 24" x 36" High Weight - 1500 lbs. Shown in: Gray Stain







Round Planter 60" Diameter x 36" High Weight - 2400 lbs. Shown in: Tan w/Gray Matrix

### 1 4 Electronic Security Equipment **Technical Data**

With the increasing threat from terrorist organizations, the use of electronic detection and access control devices offers an effective means to enhance the security posture of a structure or installation. Routine functions such as mail and package screening, entry control, and weapons search can be performed quickly and cost effectively using Commercial Off The Shelf (COTS) equipment.

Crane performs security site assessments, recommends and procures suitable COTS equipment and can perform the installation and integration of those systems if required.



Hand Held Metal Detector



Detector

High Security Vehicle Gate

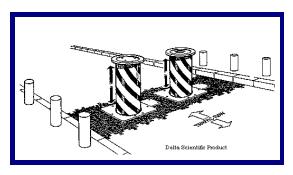


Dual Energy X-Ray Scanner

### Electronic Security Equipment Barricade Systems

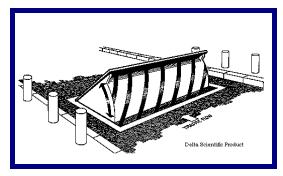
This barricade provides an extremely high degree of security against forced entry by heavily loaded trucks or passenger vehicles. In a full scale crash test conducted at Brooks Air Force Base in San Antonio, Texas a TT207S (see opposite) stopped a 15,000 pound (6803 KG) truck moving at 50 mph (80.4 kph). The truck was completely destroyed while the barricade system was fully operational after the collision - having sustained only superficial damage.

Based on these test results plus an analysis using a mathematical model of a truck collision, the ultimate strength of the TT207S has been determined to be sufficient to stop and destroy a truck weighing 30,000 pounds (13,608 KG) traveling at 50 mph (80.5 kph).



TT210

Bollards have been tested in full scale configuration and have demonstrated their ability to STOP AND DISABLE high speed heavily loaded trucks. Tests at 30 mph, 40 mph, and 51 mph were conducted using trucks weighing between 10,000 pounds and 15,000 pounds.



TT207S

The trucks were totally destroyed in each test while the Bollard Systems were operational. One system sustained minor damage and was restored to full service following minor repairs.

Since the first test of the TT210 (see opposite) Series of bollards in February of 1986, they have been in steady production and today are installed in hundreds of locations providing dayin-day-out protection and regulation of vehicle traffic.

Hydraulic bollards can be operated individually or in sets with up to 24 Bollards being controlled from a single hydraulic power unit. Wide entrances or perimeters can be quickly secured and controlled - lanes can be opened or closed as the traffic or security situation demands.

A wide range of controls, automatic operating sequences, sensors, signals and provisions to protect against extreme environmental conditions are available as Standard Operations.

### **Electronic Security Equipment**

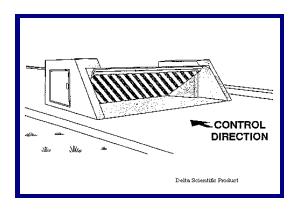
#### **Barricade Systems**

The flush-mount barricade provides an extremely high degree of security against forced entry by heavily loaded trucks or passenger vehicles. In a full scale crash test conducted at Calspan Corporation's Advanced Technology Center in Buffalo, NY, a TT20FM (see opposite) stopped a 15,000 pound (6803 KG) truck moving at 50 mph (80.4 kph). The truck was completely destroyed and there was no penetration beyond the front edge of the barricade. The barricade was fully operational after the collision - having sustained only superficial damage. It meets Department of State Specification For Vehicle Crash Testing of Perimeter Barriers and Gates SD-SDT-2.01 (April 1985). Assessment Per DOS Spec.: K12/L3.0.

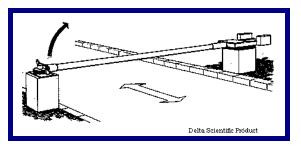
Cable beam barriers are designed for MEDIUM SECURITY applications. This generally is a case where the attack vehicle is traveling at a speed of less than 25 mph at the time of impact and weighs less that 10,000 pounds.

A frequent use is in SALLY PORT or INSPECTION PORT applications. The TT212 is used as the secondary control, backing a heavier barricade which is the first line of protection. The first barricade forces a vehicle to come to a full stop before entering the port, the TT212 prevents the vehicle in the port from leaving until authorized.

Other applications include closing off restricted or reserved parking areas, impound yards, freight terminals, storage and warehouse entrances, arms storage depots, inspection points, shipping and receiving docks, emergency lanes, and other locations where standard traffic controls or gates are not capable of



TT20FM

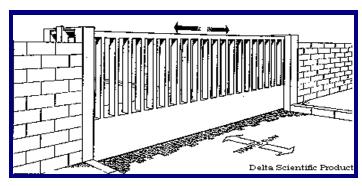


TT212

resisting crash forces or vandalism. Light weight, simple installation, compact design and ease of operation make these systems particularly well suited for stand alone or backup applications. They can be installed directly inside of standard gates and unobtrusively harden an existing entrance against forced entry by a vehicle. These systems are available either operated by a hydraulic power unit for automatic operation or in a manual configuration.

### **Electronic Security Equipment**

#### **Barricade Systems**



TT280

The TT280 Crash Rated Rolling Gate Systems have been extensively tested in both full scale configuration and in the Engineering Test Facilities of Delta. Three tests were conducted at the Naval Weapons Test Center, China Lake, CA on the same standard production configuration gate with a free opening of 12.0 feet:

34 MPH and 15,010 pounds 40.3 MPH and 14,973 pounds 55.1 MPH and 15,275 pounds

The gate was not altered between tests and only minor repairs and painting were required to restore the gate to operation. In all three tests the heavy Military trucks were destroyed and only during the third test was the gate xeverely damaged. Penetration was zero for tests one and two and less than 5.5 feet in the third test.

The strength of the gate is derived from a unique CRASH BEAM and buttress design. The crash beam is incorporated in the body of the gate and is not obvious from the outside. These gate systems can be built and installed in high security locations such as private residences or executive entrances without creating a fortress impression. The face of the gate can be built to match surrounding fences or walls.

For technical assistance or customer support contact NSWC Crane at:

(812) 854-5604/5768/5860/5612 DSN 482-5604/5768/5860/5612

# 15 Arms, Ammunition & Explosives Physical Security Assist Visits

Commander, Naval Sea Systems Command (COMNAVSEASYSCOM) (and as further delegated to Naval Ordnance Safety and Security Activity (NOSSA)), is assigned as the program manager for the Navy's AA&E physical security and ordnance transportation security programs<sup>1</sup>.

Commandant of the Marine Corps (CMC) (POS-10) manages the AA&E physical security program for the Marine Corps, requesting support from the Navy as required <sup>1</sup>.

NOSSA and CMC has tasked Crane with conducting on-site physical security assist visits at Navy and Marine Corps activities worldwide.

The purpose of assist visits is to determine required physical security upgrades for Arms, Ammunitions, and Explosives (AA&E) storage facilities, and to evaluate an activity's overall security posture according to the requirements of OPNAVINST 5530.13 and MCO P5530.14 (current revisions).

Activities that store AA&E items are surveyed for use of proper protective measures. Deficiencies are covered by physical security upgrade projects which are submitted to Marine Corps Program Management Offices for funding consideration.

Physical security equipment and hardware are recommended to activities for correction of deficiencies to protective measures.

Waivers and exceptions are recommended when correction of deficiencies is not cost effective or funding is unavailable.

Detailed trip reports listing results and recommendations of the assist visit are provided to Marine Corps Headquarters. Crane will provide physical security assist visits for Naval activities other sites if funding is provided.

For technical assistance or customer support contact Crane personnel at:

(812) 854-5768/5860/5615/5612 DSN 482-5768/5860/5615/5612

1 OPNAVINST 5530.13B of 5 Jul 1994

# 16 Arms, Ammunition & Explosives Physical Security Database Management

The Arms, Ammunition and Explosives (AA&E) Program began in 1980 for the purpose of determining necessary physical security upgrades (hardening, fencing, and lighting) for Navy and Marine Corps storage facilities. When physical security assistance visits are conducted at U.S. military sites worldwide, the findings are developed into projects to correct existing physical security deficiencies.

Commanding Officer, Naval Ordnance Safety and Security Activity(NOSSA), Indian Head, MD, and Commandant of the Marine Corps (CMC), Washington, DC, have tasked NSWC Crane with maintaining accurate databases to track physical security projects and related information. There are four major databases which track physical security information, and reports are generated from the data contained in them. The databases and reports are as follows:

**AA&E** Physical Security Upgrade Projects: The database contains AA&E physical security upgrade projects which have been identified as a result of assistance visits or written correspondence from the activity. The data may be used to assist NOSSA and CMC in setting priorities for funding allocation.

AA&E Physical Security Waivers and Exceptions: The database is maintained in conjunction with the AA&E Physical Security Upgrade Projects Database. Waivers and exceptions to protective measures are required by OPNAV-INST 5530.13B. Reports generated from the database list physical security

upgrade projects associated with the waiver or exception.

AA&E Physical Security Equipment Inventory: As funding is available, NSWC Crane procures AA&E physical security hardware and equipment. The equipment is used for correcting physical security deficiencies. The database tracks the equipment that has been procured and its related cost, the quantity on-hand at Crane, where it was shipped and the date it was shipped. If funding is not available from NOSSA or CMC Headquarters activities may provide their own funding to Crane in order for Crane to procure the necessary equipment at a reduced cost.

Marine Corps Building Database: This database is unique to the Marine Corps. It provides a list of all buildings at a Marine Corps site that store AA&E. It lists the building number, if it is a magazine or an armory, the AA&E risk category, and if the building is equipped with an intrusion detection system. The database is also used in conjunction with the AA&E Physical Security Upgrade Projects Database. Reports generated from this database list physical security upgrade projects and waiver or exception information.

**Database Reports:** Special reports are generated using the information contained in the various databases and can be designed to meet the request of any customer. In addition, standard reports have been created and are generated and distributed on a regular basis. Standard reports are as follows:

- (1) Project Status
- (2) Project Detail
- (3) Expired Waivers and Exceptions
- (4) Waivers and Exceptions due to expire Within 90 days
- (5) Waivers and Exceptions Comprehensive Details

For technical assistance or customer support contact Crane personnel at:

(812) 854-5852/5812 DSN 482-5852/5812

# 17 Wissing, Lost, Stolen or Recovered Database Management

Commandant of the Marine Corps (CMC), Headquarters, U.S. Marine Corps has tasked Crane to maintain a database of all items reported Missing, Lost, Stolen or Recovered (MLSR) by Marine Corps field activities.

Following major ordnance thefts at Camp Lejeune in October 1997, the Marine Corps instituted a number of measures to improve control of ordnance and oversight by higher authority. Part of this greater oversight involves the use of MLSR reports, which garner interest as they make their way through the Marine Corps chain of command.

Some of the types of government property that are tracked are as follows:

- All Arms, Ammunition, and Explosives and similar incendiary or destructive devices, regardless of value.
- (2) Property such as radios, computers, vehicles, and night vision equipment.
- (3) Precious metals.

Upon receipt of an MLSR report, appropriate data is entered into the database. The information is used to identify trends and provide analysis of common incidents in order to improve security measures at Marine Corps field activities.

Reports are generated quarterly and annually, and upon request from Marine Corps Headquarters. In addition, reports are provided to outside agencies, with prior approval by Marine Corps Headquarters.

For technical assistance or customer support contact Crane personnel at:

(812) 854-5852/5860 DSN 482-5852/5860

# 18 Missing, Lost, Stolen or Recovered Database Management

(Portions of the following information have been taken directly from the Navywide MLSR During Calendar Year 1999 report, published in March 2000. The information concerning the program changes is provided by Mr. Lane Ford, Former MLSR Program Manager, NCIS (Code NO9N3), Washington DC.)

The U.S. Navy Missing, Lost, Stolen or Recovered (MLSR) program as it has been known in the past ended effective 21 January 2000. Chief of Naval Operations (CNO) eliminated the program. (via NAVOP message DTG 211534Z Jan 00) as part of an Inter-Deployment Training Cycle (IDTC) workload reduction, based on the recommendations of the Fleet Review Board. This applies to all Navy activities, afloat and ashore.

The only portion of the program left is the requirement to report the loss of high risk Arms, Ammunition and Explosives (AA&E) within 48 hours by message. Though this requirement will remain, it will not be called MLSR. This type of report will be made as an OPREP3 NAVY BLUE message, in accordance with CNO (N6) message DTG 231302Z Mar 00. The format for the OPREP3 NAVY BLUE message is outlined in the CNO message, and will be incorporated into OPNAVINST 3100.6G.

For keeping track of lower-risk ammunition and explosives, the Conventional Ammunition Integrated Management System (CAIMS) is still used. For all other government property, MLSR reports are no longer required, and there are no alternative or compensating &forts

Note: The DD Form 200 will still be used within each activity to "write off" lost property per existing NAVSUP or NAVCOMPT instructions, however, copies of the DD Form 200 no longer need to be sent to NCIS or Crane. Activities and personnel are still accountable for government property in their custody.

Crane continues to maintain the MLSR database for NCIS, and will continue to provide reports of existing MLSR statistics to activities upon request, with prior approval from NCIS.

For technical assistance or customer support contact Crane personnel at:

(812) 854-5852/5698 DSN 482-5852/5698

# 19 Padlocks & Locking Systems Technical Data

There are several models of padlocks and locking systems authorized for use by the Navy. The following models are supplied/supported by Defense Locking Systems Crane:

#### Model 833 High Security Padlock

The Model 833 is the most recent model of the high security padlock and is the approved model for high security AA&E applications. This padlock can be used both ashore and aboard ship with shackle modification.



Model 833 High Security Padlock With Standard Shackle



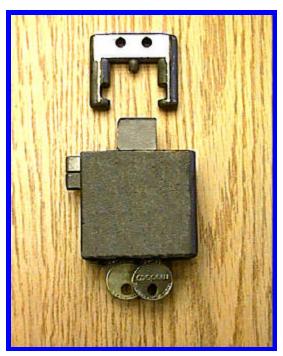
Model 833 High Security Padlock without shackle for shipboard use with 1300 Series Hasp.

When ordering high security padlocks, customers must indicate if they require padlocks with or without a standard shackle. When locks are used with the shipboard 1300 series hasp, the standard shackle is removed prior to shipment.

### Model 1381 Dual Control High Security Padlocks

The Model 1381 Dual Control Padlock is authorized for high security use and provides dual access control in a single lock and operational flexibility for implementing two-person control. The versatile dual control padlock has potential application for Risk Category I through IV Arms, Ammunition and Explosives (AA&E) and critical utilities.

The dual control padlock consists of a lock body that houses two independently keyed high security lock cylinders, two locking bars, a top plate, and a shackle designed to interface with a high security hasp. The lock body is 304L stainless steel and is designed to protect the lock cylinders and other components.



The Model 1381 Style I Dual Control Padlock is prepped for shipboard use with 1300 Series Hasp.



The Model 1381 **Style III** Dual Control Padlock is designed for use at shore facilities.

### Tufloc (Registered Trademark) Model 60 Series

The Tufloc is a unique stainless steel low profile locking device that provides a high level of security. Its design allows versatile mounting and is suitable for a variety of applications. This lock provides resistance to force and surreptitious entry. Several Tufloc models are available to adapt to various configurations. This lock is no longer issued for AA&E applications.



Tufloc Model 60-1XR

Tufloc Model 60-2XR (Right Hand)



Tufloc Model 60-2XR (Left Hand)

-



#### Model 831B High Security Padlock

The Model 831B High Security Padlock is no longer issued for AA&E applications. It has been replaced by the Model 833 High Security Padlock. When Model 831B padlocks are removed because of failure or repair, they should be replaced with the Model 833 High Security Padlock.



Model 831B High Security Padlock

#### Model 826C/D Padlock

The Model 826C/D padlock utilizes a 1/2" diameter shackle and is used primarily on gates and fences at shore facilities.



Model 826C (left) and 826D (right) Padlocks.

#### Model 826A Padlock

The Model 826A is a special application padlock which utilizes a 3/8" dameter shackle and is primarily used in securing shipboard reduction gear covers.



Model 826A Padlock

#### **General Field Service Padlock**

The military specifications for medium security padlocks were cancelled because there was no longer a valid requirement for an exposed-shackle padlock with a high security cylinder. However, a study was conducted which identified the need for a medium priced, exposed-shackle padlock. The General Field Service Padlock (GFSP) provides resistance to forced entry equal to the hardened chain or hasp; and can be used with a high resistance to a variety of adverse environmental conditions.

The General Field Service Padlock is an excellent choice for a wide variety of applications where padlocks are exposed to grit, corrosive environments, or freezing conditions. Note: hardware requirements for specific application should always be verified by referencing the appropriate security instruction.

The General Field Service Padlock can be purchased directly from Abloy Security Inc., under GSA contract #GS-07F-0368J, SIN 246-36 Locking Devices at phone 800-367-4598.



General Field Service Padlock

### **Low Security Padlocks**

Military Specification MIL-P-17802 (Low-Security Padlocks) is no longer valid. Low security padlocks may be purchased through the Defense Supply Center Philadelphia (DSCP), these are purchased by DSCP against Commercial Item Description (CID) A-A-1927D, which is supported by MS356473 and MS21313G. The locks currently available are listed below:



American Padlocks			
NSN	Part Number	Item Description	
5340-00-158-3805	5200GL	Steel Padlock	
5340-01-437-0625	5200GLKA6	Set of 6 Steel Padlocks, Keyed-Alike	
5340-01-408-8452	5200GLKA10	Set of 10 Steel Padlocks, Keyed-Alike	
5340-01-437-0627	5200GLKA24	Set of 24 Steel Padlocks, Keyed-Alike	
5340-01-408-8434	5202GL	Steel Padlock w/3" Shackle	
5340-01-437-0630	5202GLKA10	Set of 10 Steel Padlocks w/3" Shackle, Keyed-Alike	

#### **Support Services** & Technical Assistance

Crane provides and maintains high security locking systems in support of AA&E, Nuclear Weapons and specialized equipment. Technical assistance, guidance, training, operation and maintenance instructions, are available. Computer-based logistic support is provided; including serialization, material control to eliminate compromise, shipments via controlled mail (Certified/Registered, etc.), and systems inventories upon request.

The following procedures for requesting and turning in material are:

- (1) Material can be requested by letter (fax), or message and must be signed by the Commanding Officer or by direction of the Commanding Officer. When requesting padlocks for shipboard use, the type of hasp the padlock will be used on must be stated. Padlocks to be used on 1300 Series Hasps need special preparation and instructions.
- (2) When returning material to Code 4044, provide a written document that states why the material is being turned in. Keys should be attached to the associated lock/cylinder.

The following information should be provided in each request:

- (1) Point of contact and telephone number.
- (2) Complete shipping address.

Requests for material/services should be mailed to:

Commander NAVSURFWARCENDIV Code 4044, Bldg. 8 300 Highway 361 Crane, IN 47522-5001

For technical assistance or customer support contact Crane personnel at:

(812) 854-3354/1354/5635 DSN 482-3354/1354/5635

## Physical Security, Locking Systems, & Force Protection

#### **Web Page Information**

Additional information about the Physical Security, Locking Systems, & Force Protection Branch at Crane may be obtained by logging onto our web site. Log on to http://www.security.crane.navy.mil. Scroll down to the bottom of the page and click on "Continue to Defense Security Systems." Scroll down the Defense Security Systems page and select either AA&E Physical Security, Lock and Key Systems, or Force Protection Systems.

Copies of this Services and Products Brochure may also be obtained from either web site by downloading the <u>PDF version</u>. Users must have Adobe Acrobat Reader, available on the <u>Adobe Acrobat Web Site</u>, on their computer to be able to access the PDF version.

Other links within the Defense Security Systems web page which may be of interest include: Electronic Security Systems, Electronic Badging and Access Control, Shipboard Physical Security, the Smart Card program, Military Sealift Command Security Enhancements, and the Smart Ship project. Additional information on the Integrated Security and Identification System (ISIS) can also be found at this web site.

For technical assistance or customer support contact Crane at:

(812) 854-5852/6994/1298 DSN 482-5852/6994/1298

#### Request for Additional Copies of Physical Security, Locking Systems and Force Protection Services & Products Brochure

Additional copies of the Physical Security, Locking Systems, and Force Protection Services and Products brochure may be obtained upon request. Requests can be made by telephone, or by mailing or faxing copies of this form.

Telephone requests to DSN 482-6994 or commercial 812-854-6994. Fax requests to DSN 482-5919 or commercial 812-854-5919. E-mail requests to Pam Davis at FP\_Brochure\_POC@crane.navy.mil.

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